



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

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646.4002

Job Sheet 192049



Part No: 646.4002

Job Qty: 1 pcs

Part Name: AS350 Wiper Deflector



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/14/19

Job Tracking No:

Due Date: 4/12/19

Created By: Marie Lajeunesse

Type: SOLD *SL*Description: *order 11857*

Note: DWG REV C1 IPP REV:A 12.12.23 NEW ISSUE DD VERF:JLM IPP REV:B 16.01.07 DWG REV.C DD
VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Packaging 1 - Pick Kit	1 pcs		4/12/19	0.00	0.00	Packaging 1 - 1		
							Packaging 1 - 2		
							Packaging 1 - 3		
							Packaging 1 - 4		
							Packaging 1 - 5		
							Packaging 1 - 6		
							Packaging 1 - 7		
							Packaging 1 - 8		
							Packaging 1 - 9		
							Packaging 1 - 10		
							Packaging 1 - 11		
							Packaging 1 - 12		
							Packaging 1 - 13		
							Packaging 1 - 14		
							Packaging 1 - 15		
							Packaging 1 - 16		
							Packaging 1 - 17		
							Packaging 1 - 18		
							Packaging 1 - 19		
							Packaging 1 - 20		
							Packaging 1 - 21		
							Packaging 1 - 22		
							Packaging 1 - 23	<i>PC</i>	APR 04 2019
							Packaging 1 - 24		
							Packaging 1 - 25		
							Packaging 1 - 26		
							Packaging 1 - 27		
							Packaging 1 - 28		
							Packaging 1 - 29		
							Packaging 1 - 30		

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Container No: S169707



Part: 646.4002

Job No: 192049

Serial No/Batch: S169707

Revision:

Inspector:

Exp Date:

Instructions: FAA STC SR02180LA 14/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30

					Packaging 1 - 31	
					Packaging 1 - 32	
					Packaging 1 - 33	
					Packaging 1 - 34	
					Packaging 1 - 35	
					Packaging 1 - 36	
120 QC 4	1 pcs	4/12/19	0.00 0.00		QC 4 - 28	
					QC 4 - 42	
					QC 4 - 58	
					QC 4 - 69	
					QC 4 - 9	
					QC 4 - 46	
130 Packaging 3-1 - Stock - B4B	1 pcs	4/12/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
135 DC - 1 - B4B	1 pcs	4/12/19	0.00 0.00		DC - 1 - B4B	
					DC - 2 - B4B	
140 QC 21 - FG	1 pcs	4/12/19	0.00 0.00		QC 21 - FG - 21	
					QC 21 - FG - 70	
					QC 21 - FG - 53	

Part Op 110 - (Pick Kit)

Descriptions: 120 - (QC4- 100% Inspect kits for completeness)

130 - (Identify as per dwg & Stock Location: _____) Identify and pack for shipping as per PPP 646.4002 Location : FG102

135 - (Document Control) Photocopy bluefile & type labels per PPP 646.4002

140 - (QC21- Final Inspection - Work Order Release)

009090

05-19

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
600.1012	Sealant PR1425B2 (#654 sem)	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5133790
646.3410	LH Wiper Deflector	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5162171
646.3411	RH Wiper Deflector	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5089703
646.3814	Wiper Bracket	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5160471
MS21042L3	Nut	6 Ea (6 ea)	110-Packaging 1 - Pick Kit	5157402
MS24694-S53	Screw	2 Ea (2 ea)	110-Packaging 1 - Pick Kit	F113359
MS27039-1-18	Screw	2 Ea (2 ea)	110-Packaging 1 - Pick Kit	F124326
MS27039-1-19	Screw	2 Ea (2 ea)	110-Packaging 1 - Pick Kit	5155664
NAS1149F0332P	Washer	16 Ea (16 ea)	110-Packaging 1 - Pick Kit	5157648

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Packaging 1 - Pick Kit	600.1012	1	31	0
	646.3410	1	15	0
	646.3411	1	17	0
	646.3814	2	18	0
	MS21042L3	6	3,616	0
	MS24694-S53	2	198	0
	MS27039-1-18	2	1,148	0
	MS27039-1-19	2	813	0
	NAS1149F0332P	16	4,758	0

Part Specifications

Specifications could not be found.

Plex 3/14/19 3:19 PM Dart.lajeunesse.marie

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

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NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24916.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

5	5	5	78	601.3875	SCREW	AN3-12A				
1	1	1	77	646.9410	SHIM	AN3-12A				
	4	4	76	601.2764	WASHER	AN3-12A				
	2	2	75	601.2973	LOCKNUT	MS21042-08				
	2	2	74	601.2988	SCREW	MS27039-0813				
	2	2	73	601.2943	LOCKNUT	MS21042-03				
	2	2	72	601.3128	NUT	AN316CAR				
	2	2	71	601.3209	LOCKNUT	MS21042-04				
	4	4	70	601.2638	WASHER	AN316CAR				
	2	2	69	601.2669	BOLT	AN316CAR				
	2	2	68	601.3119	CLEVIS	AN316CAR				
	2	2	67	601.3121	EYE BOLT	AN316CAR				
	2	2	66	650.9201	EYE BRACKET ASSY	AN316CAR				
REF	REF	REF	65	647.5701	GPS MOUNT KIT	AN316CAR				
		2	64	601.3151	WASHER	AN316CAR				
			63	601.2911	SCREW	MS24694553				
	24	24	62	601.2637	SCREW	MS27039-1-16				
2	2	2	61	601.2763	BOLT	AN3-12A				
	1	1	60	646.3913	SHIM					
	4	4	59	646.3912	SHIM					
	1	1	58	646.3911	SHIM					
	4	4	57	646.3910	SHIM					
	5	5	56	600.1013	PRIMER					
	8 FT	8 FT	55	600.0129	VHB TAPE					
	1	1	54	600.1012	SEALANT	PR-1425 CLASS B				
	1	1	53	600.0991	MAGNABOND 6396 PART B					
	1	1	52	600.0990	MAGNABOND 6396 PART A					
6	10	10	51	601.2826	BOLT	AN3-11A				
		2	50	646.3814	WIPER BRACKET					
		2	49	601.2910	SCREW	MS27039-1-18				
2		2	48	601.1365	SCREW	MS27039-1-10				
2		2	47	646.3719	DOUBLER					
	2	2	46	646.3718	CUSTOM WASHER					
1		1	45	646.3717	DOUBLER					
	22	22	44	601.1948	SCREW	MS27039-1-19				
	2	2	43	601.1952	SCREW	MS27039-1-20				
	4	4	42	601.1956	SCREW	MS27039-1-21				
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

REV	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 0219, 0221, 0221S & 0221S	01/06/2010	P. BRAVO
B	INCORPORATED ECN 0204S, 0207S & 0207S	11/04/2014	P. BRAVO
C	INCORPORATED ECN 0208	01/06/2015	P. BRAVO

		2		2	41	601.2829	SCREW	MS24694554		
		2		2	40	601.2831	RIVET	MS20426ADS-7		
		1		1	39	646.3716	GAUGE BRACKET			
		6		6	38	601.1953	SCREW	MS27039-1-12		
	2	2		2	37	646.3715	STRUT DOUBLER			
	2	2		2	36	601.2824	BOLT	AN3-5A		
12	36			36	35	601.2277	RIVET	CORNAISS-300		
				18	34	600.0795	NUTPLATE	MS21047-3		
3	3			3	33	601.2565	RIVET	MS20470ADS-7		
1	1			1	32	646.3813	STRUT BRACKET			
4	4			4	31	601.2822	BOLT	AN3-3A		
2	2			2	30	646.3812	GUSSET BRACKET			
8	8			8	29	601.2564	RIVET	MS20470ADS-6		
1	1			1	28	646.3714	GUSSET			
	1	1		1	27	646.3610	FILLER			
	3	3		3	26	601.2830	SCREW	MS24694553		
	2	2		2	25	601.2825	BOLT	AN3-5A		
	1	1		1	24	646.3811	RADIUS BLOCK			
	1	1		1	23	646.3712	CLIP			
	1	1		1	22	646.3711	CLIP			
8	8			8	21	601.2832	RIVET	MS20470ADS-5.5		
14	14			14	20	601.2020	RIVET	CR3213-5-3		
4	6	4	6	10	19	601.2823	BOLT	AN3-4A		
	1	1	1	1	18	601.2827	BOLT	AN3-13A		
	5	5	5	5	17	601.2912	SCREW	MS24694551		
1	1			1	16	646.3713	GUSSET			
1	1			1	15	646.3210	SUPPORT			
	1			1	14	646.3710	DOUBLER			
	1	1		1	13	646.3110	CHANNEL			
14	10	8	53	61	12	601.1624	LOCKNUT	MS21042-3		
16	32	18	120	161	144	11	601.1607	WASHER	NAS11497032SP	
				10	646.3410		LH WIPER DEFLECTOR			
				9	646.3411		RH WIPER DEFLECTOR			
		2	2	8	647.7703		STRUT ASSY			
		2	2	7	647.0112		STRUT BRACKET			
	1	1		6	646.3511		STRUT			
	1	1	1	5	646.3510		STRUT			
2		2		4	646.3810		BRACKET			
		1	1	3	646.2910		DEFLECTOR			
	1	1		2	646.3001		LOWER CUTTER ASSY			
		1	1	1	646.3301		UPPER CUTTER ASSY			
X					646.4006		LOWER CUTTER TYPED PROVISIONS			
	X				646.4005		LOWER CUTTER REMOVABLE PROVISIONS			
		X			646.4004		FIXED PROVISIONS KIT			
			X		646.4003		CABLE CUTTERS KIT WITHOUT FIXED PROVISIONS			
				X	646.4002		AS350 WIPER DEFLECTOR KIT			
				X	646.4001		AS350 CABLE CUTTERS KIT			
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC

QTY		NEXT ASSY (S)		ORIGINATOR DATE: 08-27-08 DRAWN BY: CHUCKER 1. HUPP DESIGNED BY: P. BRAVO P. BRAVO 08-27-08 CONTRACT NO:		3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5900	
DIMENSIONS SPECIFIED DIMENSIONS ARE IN INCHES 2 PLACES DECIMALS: .0100 3 PLACES DECIMALS: .0010 ANGLES: 1/2°		SCALE: NONE		SHEET: 1 OF 5		DART AEROSPACE APICAL INDUSTRIES INC. 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5900	
AS350 CABLE CUTTERS KIT		GAGE CODE: 07M26		DWG. NO: 646.4000		REV: C	